

NATURAL RESOURCES CONSERVATION SERVICE

IRRIGATION STORAGE RESERVOIR – CODE 436

OPERATION AND MAINTENANCE

Land Owner/Operator _____

Address _____

Parish _____ SWCD _____ Farm/Tract No. _____

Practice Location Section _____ Township _____ Range _____

Prepared By _____ Date _____

A properly operated and maintained irrigation storage reservoir is an asset to the farm. This structure is designed and installed to store water for short-term regulation per the site specific design. The estimated life span of this installation is at least 10 years. The life of this installation can be assured and usually increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation to maintain satisfactory performance. Here are some recommendations to help you develop a good operation and maintenance program:

GENERAL RECOMMENDATIONS

- Annually inspect reservoir for damage from normal use. Inspect the spillways, inlets, outlets and control gates for proper functioning for their ability to maintain the water level to design elevations. At no more than 3 to 6 month intervals open and close gates and valves to assure proper function.
- Immediately remove any blockage or obstructions and repair any damage.
- Inspect inlet, embankments and spillways after heavy rains for possible damage. Promptly repair any damage.
- Annually inspect the downstream toe of the dam. If there are wet areas or seeps, contact the local NRCS office for additional assistance.
- Maintain vigorous growth of vegetative coverings. This includes reseeding, fertilization, and application of herbicides when necessary. Periodic mowing may also be needed to control height.
- Fill rills and gullies that occur on the embankments and/or spillway and re-vegetate.
- Maintain a grass filter strip around the perimeter of the reservoir to trap sediment.
- Check downstream floodplain at least once every 5 years to assure life or property will not be threatened in the case of a dam failure.
- If fences are installed, they shall be maintained to prevent unauthorized or livestock entry.
- Immediately repair any vandalism, vehicular, or livestock damage to any earthfills, spillways, outlets or other appurtenance.
- Remove debris that may accumulate at the reservoir and immediately upstream or downstream from the basin.
- Make sure all structure drains are functional and soil is not being transported through the drainage system. The screens and/or rodent guards shall also be kept in place.

Contact your local NRCS Field Office for any additional technical assistance you might need for implementation of this operation and maintenance plan for your irrigation canal or lateral.

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- Repair spalls, cracks and weathered areas in concrete surfaces.
- Repair or replace rusted or damaged metal and apply paint as a protective coating.
- Inspect for damage from rodents or burrowing animals. Repair any damage. Take appropriate corrective actions to alleviate further damage.
- Remove woody vegetation from embankments.
- Avoid excessive travel on any portion of the system that will harm or destroy the vegetative cover.

ADDITIONAL RECOMMENDATIONS